

## WEST Search History

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DATE: Monday, October 02, 2006

**Hide? Set Name Query****Hit Count***DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=NO; OP=ADJ*☐ L2 de-19640618-\$.did. or de-19628700-\$.did. or ep-630892-\$.did.

4

END OF SEARCH HISTORY

AN 2004:20679 CAPLUS  
 DN 140:77358  
 ED Entered STN: 11 Jan 2004  
 TI Synthesis of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments  
 IN Parker, Robert; Precht, Frank; Haremza, Sylke; Meyer, Frank; Vill, Volkmar; Gesekus, Gunnar  
 PA Basf Aktiengesellschaft, Germany  
 SO PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 IC ICM C07D309-00  
 CC 33-2 (Carbohydrates)  
 Section cross-reference(s): 75

*this applies*

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004002979	A2	20040108	WO 2003-EP6885	20030630
	WO 2004002979	A3	20040422		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10229530	A1	20040115	DE 2002-10229530	20020701
	AU 2003250860	A1	20040119	AU 2003-250860	20030630
	EP 1519931	A2	20050406	EP 2003-761553	20030630
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2005538969	T2	20051222	JP 2004-516745	20030630
	CN 1735606	A	20060215	CN 2003-815407	20030630
	US 2005230660	A1	20051020	US 2004-518389	20041230
PRAI	DE 2002-10229530	A	20020701		
	WO 2003-EP6885	W	20030630		

CLASS

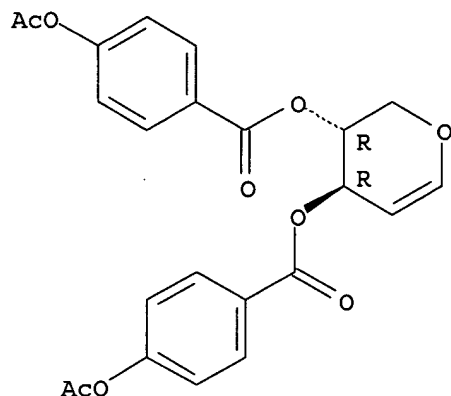
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004002979	ICM	C07D309-00
	IPCI	C07D0309-00 [ICM,7]
	IPCR	C07D0309-00 [I,C*]; C07D0309-30 [I,A]
	ECLA	C07D309/30
DE 10229530	IPCI	C07D0309-16 [ICM,7]; C07D0309-00 [ICM,7,C*]; C09K0019-34 [ICS,7]
	IPCR	C07D0309-00 [I,C*]; C07D0309-30 [I,A]
	ECLA	C07D309/30
AU 2003250860	IPCI	C07D0309-00 [ICM,7]
	IPCR	C07D0309-00 [I,C*]; C07D0309-30 [I,A]
EP 1519931	IPCI	C07D0309-30 [ICM,7]; C07D0309-00 [ICM,7,C*]
	IPCR	C07D0309-00 [I,C*]; C07D0309-30 [I,A]
JP 2005538969	IPCI	C07D0309-30 [ICM,7]; C07D0309-00 [ICM,7,C*]; C09K0019-54 [ICS,7]; C07M0007-00 [ICS,7]
	FTERM	4C062/BB14; 4H027/BA01; 4H027/BA02; 4H027/BA04; 4H027/BD16
CN 1735606	IPCI	C07D0309-30 [I,A]; C07D0309-00 [I,C*]; C09K0019-58 [I,A]; C09K0019-34 [I,A]
	ECLA	C07D309/30
US 2005230660	IPCI	C09K0019-58 [ICM,7]; C07D0039-16 [ICS,7]
	IPCR	C07D0309-00 [I,C*]; C07D0309-30 [I,A]

OS MARPAT 140:77358

- AB The invention relates to chiral 3,4-dihydro-2H-pyran compds., to diastereomers thereof, and to the use of these compds. as chiral dopants for liquid crystal systems (no data). The invention also relates to non-polymerizable or polymerizable liquid crystal compns., which contain at least one inventive chiral 3,4-dihydro-2H-pyran compound, to the use of these non-polymerizable or polymerizable liquid crystal compns. for producing optical components, to the use of the polymerizable liquid crystal compns. for imprinting or coating substrates, for producing dispersions and emulsions, films or pigments, and to these optical elements, imprinted or coated substrates, dispersions and emulsions, films and pigments (no data). Thus, D-xylal and D-arabinal were prepared in three steps from their parent sugars by acetylation, regioselective dehydrative deacetylation of the 1,2 positions, and deacylation to give the free hydroxy forms of both glycals. The free glycal could then be reacted with, e.g.,  $\text{H}_3\text{C}(\text{CH}_2)_6\text{O}-4-\text{C}_6\text{H}_4-4-\text{C}_6\text{H}_4\text{C}(\text{O})\text{Cl}$  to give the title compds. of interest.
- ST glycal prepn liq crystal dopant dispersion emulsion coating pigment; sugar dehydrative deacetylation prepn glycal
- IT Deacetylation  
(dehydrative; preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)
- IT Carbohydrates, preparation  
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(glycals; preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)
- IT Coating materials  
Disperse systems  
Dopants  
Emulsions  
Liquid crystals  
Pigments, nonbiological  
(preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)
- IT 58-86-6, D-Xylose, reactions 98-88-4, Benzoyl chloride 99-96-7, 4-Hydroxybenzoic acid, reactions 100-07-2, 4-Methoxybenzoic acid chloride 111-83-1, 1-Bromooctane 10323-20-3, D-Arabinose 27914-73-4 59748-17-3 65355-31-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)
- IT 496-61-7P 496-62-8P 2493-84-7P 3152-43-0P 3945-17-3P 4049-33-6P 19186-37-9P 28547-23-1P 58860-84-7P 640723-52-0P 640723-53-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)
- IT 640723-51-9P 640723-54-2P 640723-55-3P 640723-56-4P 640723-57-5P 640723-58-6P 640723-59-7P 640723-60-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)
- IT 640723-52-0P 640723-53-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)
- RN 640723-52-0 CAPLUS
- CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(acetyloxy)benzoate]

(9CI) (CA INDEX NAME)

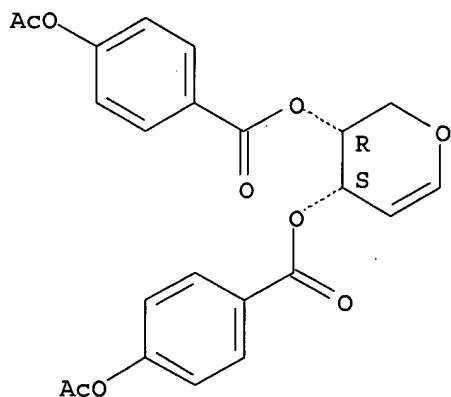
Absolute stereochemistry.



RN 640723-53-1 CAPLUS

CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(acetyloxy)benzoate]  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 640723-51-9P 640723-54-2P 640723-55-3P

640723-56-4P 640723-57-5P 640723-58-6P

640723-59-7P 640723-60-0P

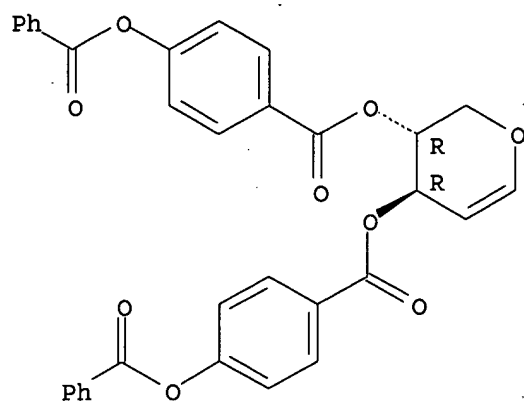
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of glycal derivs. for use as chiral dopants for liquid crystal systems or in dispersions, emulsions, coating films, or pigments)

RN 640723-51-9 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(benzoyloxy)benzoate]  
(9CI) (CA INDEX NAME)

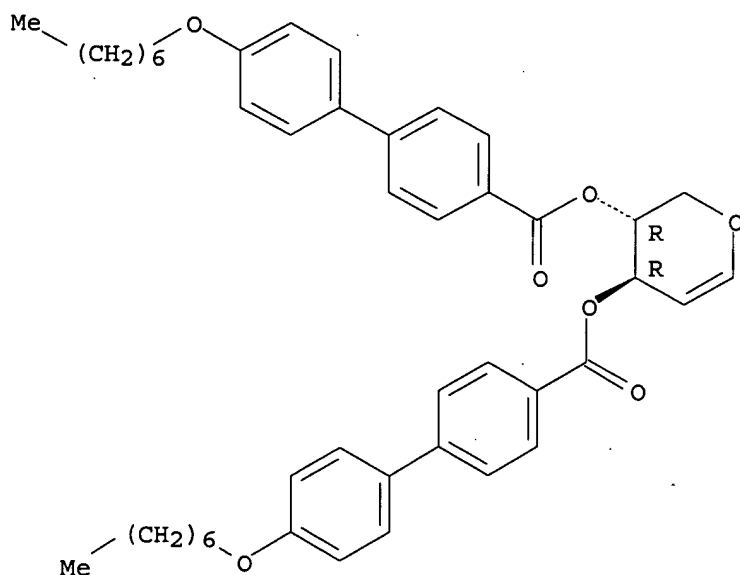
Absolute stereochemistry.



RN 640723-54-2 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4'-(heptyloxy)[1,1'-biphenyl]-4-carboxylate] (9CI) (CA INDEX NAME)

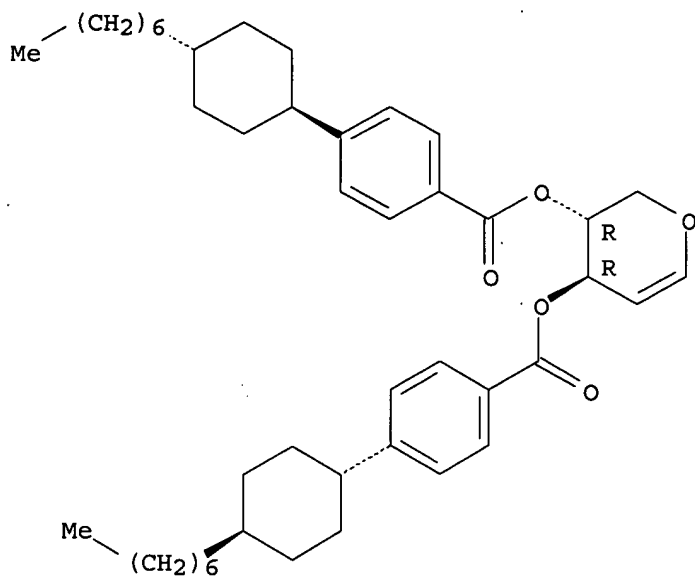
Absolute stereochemistry.



RN 640723-55-3 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-(trans-4-heptylcyclohexyl)benzoate] (9CI) (CA INDEX NAME)

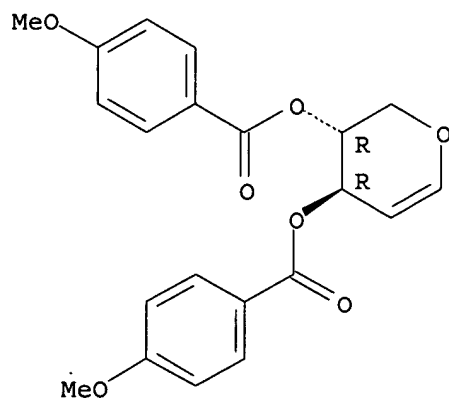
Absolute stereochemistry.



RN 640723-56-4 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis(4-methoxybenzoate) (9CI)  
(CA INDEX NAME)

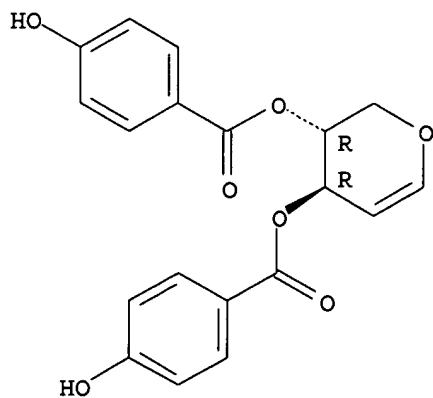
Absolute stereochemistry.



RN 640723-57-5 CAPLUS

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis(4-hydroxybenzoate) (9CI)  
(CA INDEX NAME)

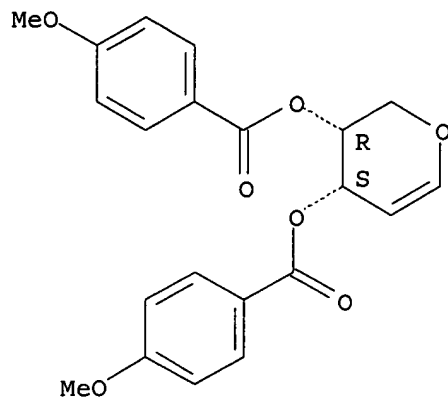
Absolute stereochemistry.



RN 640723-58-6 CAPLUS

CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis(4-methoxybenzoate)  
(9CI) (CA INDEX NAME)

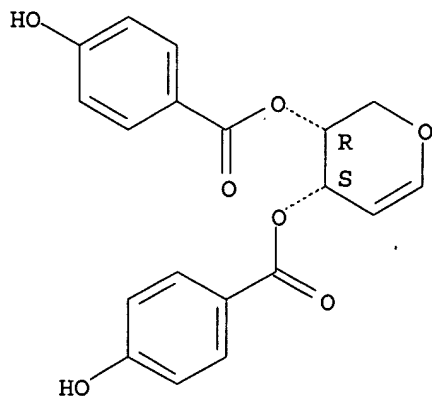
Absolute stereochemistry.



RN 640723-59-7 CAPLUS

CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis(4-hydroxybenzoate)  
(9CI) (CA INDEX NAME)

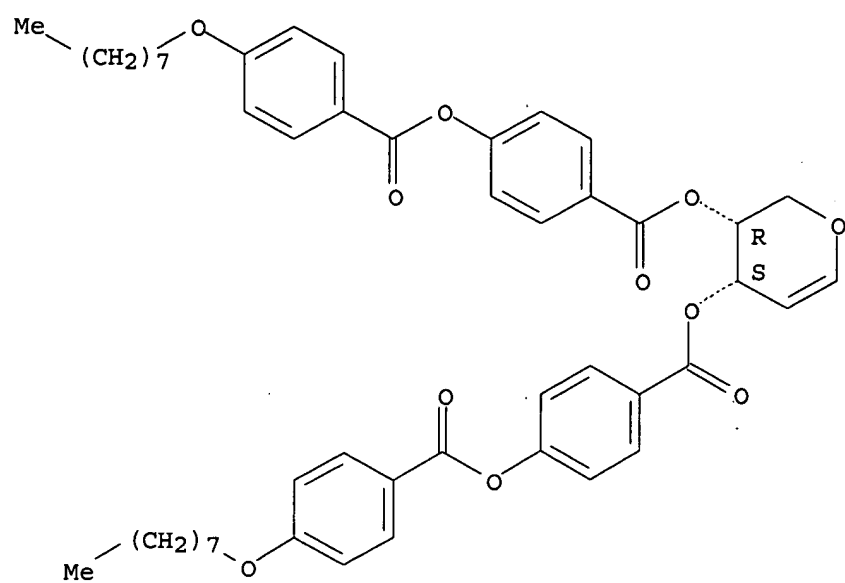
Absolute stereochemistry.



RN 640723-60-0 CAPLUS

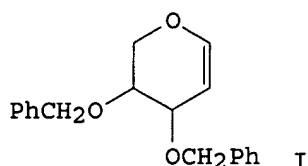
CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-, bis[4-[[4-(octyloxy)benzoyl]oxy]benzoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.





AN 1988:549882 CAPLUS  
 DN 109:149882  
 ED Entered STN: 28 Oct 1988  
 TI Benzyl ethers of D- and L-arabinals as chiral synthons in organic synthesis  
 AU Tolstikov, A. G.; Khakhalina, N. V.; Spirikhin, L. V.  
 CS Inst. Chem., Ufa, USSR  
 SO Synthesis (1988), (3), 221-2  
 CODEN: SYNTBF; ISSN: 0039-7881  
 DT Journal  
 LA English  
 CC 33-2 (Carbohydrates)  
 OS CASREACT 109:149882  
 GI



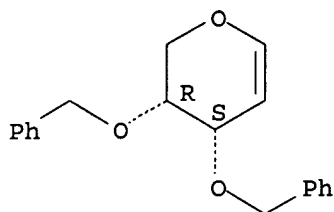
AB Acidic opening of benzyl ethers of D- and L-arabinal catalyzed by HgSO<sub>4</sub> is a key step in the preparation of chiral synthons with selectively substituted OH groups. Thus, benzylation of D-arabinal with PhCH<sub>2</sub>Cl gave 95% di-O-benzyl derivative I, which was treated with HgSO<sub>4</sub> and H<sub>2</sub>SO<sub>4</sub> in dioxane to give 65% (4S)-HOCH<sub>2</sub>CH(OCH<sub>2</sub>Ph)CH:CHCHO. The latter on sequential Wittig reaction with Ph<sub>3</sub>P:CHCO<sub>2</sub>Et, O-tosylation, and catalytic hydrogenation gave (6S)-TsOCH<sub>2</sub>CH(OH)(CH<sub>2</sub>)<sub>4</sub>CO<sub>2</sub>Et (Ts = tosyl).  
 ST benzylarabinal chiral synthon; arabinal benzyl chiral synthon  
 IT Synthons  
 (chiral, benzylarabinals, for organic synthesis)  
 IT 1099-45-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Wittig reaction of, with (benzyloxy)hydroxypentenal)  
 IT 116556-76-4P 116556-77-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and Wittig reactions of)  
 IT 116556-82-2P 116556-83-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and hydrogenation of)  
 IT 116661-76-8P 116661-77-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and ring cleavage of)  
 IT 116556-80-0P 116556-81-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and tosylation of)  
 IT 116556-78-6P 116556-79-7P 116556-84-4P 116556-85-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 IT 6228-47-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with butyllithium and (benzyloxy)hydroxypentenal)  
 IT 496-61-7 3945-18-4, L-Arabinal  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (O-benylation of)  
 IT 116661-76-8P 116661-77-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and ring cleavage of)

RN 116661-76-8 CAPLUS

CN D-erythro-Pent-1-enitol, 1,5-anhydro-2-deoxy-3,4-bis-O-(phenylmethyl)-  
(9CI) (CA INDEX NAME)

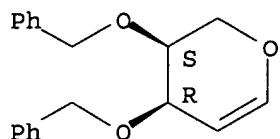
Absolute stereochemistry.



RN 116661-77-9 CAPLUS

CN D-erythro-Pent-4-enitol, 1,5-anhydro-4-deoxy-2,3-bis-O-(phenylmethyl)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L7 ANSWER 41 OF 46 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1988:455124 CAPLUS

DN 109:55124

ED Entered STN: 19 Aug 1988

TI Synthesis of 2-deoxy-2-iodoglycosyl phosphoramidates

AU Lafont, Dominique; Descotes, Gerard

CS Lab. Chim. Org., Univ. Lyon I, Villeurbanne, F-69622, Fr.

SO Carbohydrate Research (1987), 166(2), 195-209

CODEN: CRBRAT; ISSN: 0008-6215

DT Journal

LA French

CC 33-7 (Carbohydrates)

OS CASREACT 109:55124

AB Addition of IN3 to acetylated, benzylated, and methoxymethylated glycals yielded 2-deoxy-2-iodoglycosyl azides and 1,2-trans configuration.

Stereoselectivity of the reaction favored the manno and talo configurations starting from D-glucal and D-galactal, resp. With D-xylal derivs., the stereoselectivity depended on the nature of the substituents. The Staudinger reaction of 2-deoxy-2-iodoglycosyl azides with P(OMe)3 led to the 2-deoxy-2-iodoglycosyl phosphoramidates in high yield.

ST glycal iodine azide stereochem; deoxyiodoglycosyl azide prepn phosphorylation; phosphoramidate deoxyiodoglycosyl

IT Stereochemistry

(of azidation of glycals with iodine azide)

IT Carbohydrates and Sugars, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(glycals, reaction of, with iodine azide, stereochem. of)

IT 13265-84-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(methoxymethylation of)

IT 496-62-8P

(preparation and benzylation of)

RL: SPN (Synthetic preparation); PREP (Preparation)

IT	115220-82-1P	115220-83-2P	115220-84-3P	115268-25-2P
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(preparation and reaction of, with iodine azide, stereochem. of)

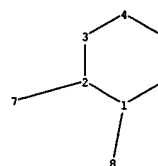
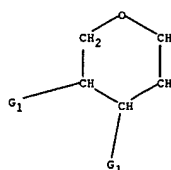
RL: SPN (Synthetic preparation); PREP (Preparation)

IT	2873-29-2	3152-43-0	4098-06-0	55628-54-1	80040-79-5
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(reaction of, with iodine azide, stereochem. of)

(preparation and reaction of, with iodine azide, stereochem. of)

CN D-threo-Pent-1-enitol, 1,5-anhydro-2-deoxy-3,4-bis-O-(phenylmethyl)- (9CI)  
(CA INDEX NAME)



chain nodes :

7 8

ring nodes :

1 2 3 4 5 6

chain bonds :

1-8 2-7

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

1-2 1-6 1-8 2-3 2-7 3-4 4-5 5-6

G1:C,O,S,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS8:CLASS